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LECTURES ON ASTHMA.

DELIVERED AT HOTEL DIEU, BY PROF. TROUSSEAU.

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LECTURE VI.—TREATMENT OF ASTHMA.

IN some places where asthma is a common malady, the treatment of this affection was formerly given up to empirics. In the East Indies, it was a popular remedy to smoke a certain plant, which was nothing but the *datura metel*. Dr. Anderson, a physician at Madras, recommended the use of this plant; he sent some of it to an English officer, who brought it to Europe in 1802, and gave part of it to Dr. Sims, of Edinburgh. That gentleman, perceiving its efficacy, tried as a substitute the *datura stramonium*, and to-day the stramonium has become a popular remedy in the treatment of asthma.

What we have said of the stramonium is applicable to the other species, the *ferox* and *fastuosa*, as well as to the *metel* which was first employed, and to the other *Solanaceæ*; but most commonly it is the stramonium which is employed. Of all the remedies administered to overcome the attacks of asthma, this usually succeeds the best. Its dried leaves may be smoked, either in a pipe or rolled up in paper in the form of cigarettes. This remedy does not succeed with all cases; it is generally without effect in habitual smokers. It is easy to understand this, when we reflect that tobacco is a poisonous solanum, and consequently belongs to the same family as *datura*; so that being accustomed to the action of nicotine may hinder the action of the active principle of stramonium. Nevertheless, I have known tobacco smokers who found relief from stramonium; which proves that this has a specific action different up to a certain point from that of nicotine, and that consequently one cannot replace the other entirely. There are, at the same time, asthmatics, who, not making an habitual use of tobacco, are able to calm their attacks by smoking that plant. I myself am of the number; and I have already told you that it is often sufficient for me to take a few whiffs of a cigar to obtain entire relief.

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In general terms, all the poisonous Solanaceæ—*Datura*, *Tobacco*, *Hyoscyamus*, *Belladonna*—possess more or less the same properties. They all enter into the composition of the *cigarettes Espic* of Bordeaux, cigarettes which have enjoyed for a long time a great reputation in the treatment of pure asthma and pulmonary catarrhs, complicated with nervous accidents. They are prepared in the following manner:

Selected leaves of <i>Belladonna</i> ,	-	-	-	0.30 centigr.
" " " <i>Hyoscyamus</i> ,	-	-	-	0.15 "
" " " <i>Stramonium</i> ,	-	-	-	0.15 "
" " " <i>Conium</i> ,	-	-	-	0.05 "
Gummy extract of <i>Opium</i> ,	-	-	-	0.013 milligr.
Cherry-laurel Water	-	-	-	q. s.

The leaves, dried with care and freed from their nervures, are broken up and carefully mixed. The opium is dissolved in the cherry-laurel water; the solution is equally distributed over the mass. The paper which is used to form the cigarettes is previously washed, at the time of the moistening of the plants above mentioned, with the cherry-laurel water, and suitably dried. We can understand the success of this remedy.

It is always very important, when we prescribe to asthmatics the use of the *datura* and other solana, to proscribe the abuse of them; otherwise they would soon exhaust the power of these remedies. It is when the attack is violent, and only then, that recourse should be had to them. The patient should smoke two cigarettes a day, or rather each night at the moment of the attack, and not seven, eight, or ten, as a great many are tempted to do.

When the patient cannot smoke, a substitute may be supplied by burning the *datura* in his chamber, surrounding him in this way with an atmosphere of antispasmodic smoke.

I repeat, with this method of treatment, as with all, at least with all those addressed to nervous complaints, we must pay special attention to individual peculiarities. One patient will be benefited by the *Datura*, another by *Belladonna*, another by *Hyoscyamus*, a fourth by *Tobacco*. There are those, also, and the patient No. 1 is of the number, who cannot bear the Solanaceæ; for these we must employ other remedies justly extolled.

Among these remedies, I would mention fumigations of nitre paper, made in the following way:—make a saturated solution of nitrate of potash, with which a sheet of unsized paper is to be soaked. This paper, properly dried, is divided into a certain number of parts, and each one of them is rolled into the form of cigarettes, which the patient smokes like a tobacco cigarette. If he cannot use it in this way, the paper is rolled up into a ball, and then lighted; the smoke is received into a tunnel, or more simply still, into a cone of paper, of which the patient places the end in his mouth, inhaling, thus, whiffs of the smoke.

In some patients I have associated both methods of treatment, by causing them to roll up the leaves of the solana in a cigarette of nitre paper.

Among the remedies used in the treatment of asthma, is one, by turns vaunted by some and proscribed by others in too sweeping a manner, for in a certain measure it renders signal services; I refer to the application of ammonia to the back part of the pharynx.

This treatment is due to Ducros de (Sixt). Called to a patient suffering from asthma, he applied, by means of forceps, to the back part of the pharynx, a large hair pencil filled with water and aqua ammoniæ in equal parts.

An eccentric man, and full of the strangest medical theories, Ducros was led to this practice by this singular idea, that the bottom of the pharynx was the centre from which emanated all the nervous power of which he thus sought to modify the action. Strange as his point of departure was, he obtained real success from his ammoniacal applications; that which he obtained particularly in the case of the sister of Louis Philippe, gave him at once a great reputation in Paris. Experiments made by other physicians, by M. Rayer, by myself, showed in some cases the efficacy of this remedy. But in others I had occasion, for my own part, not to flatter myself for having employed it; formidable symptoms occurred at the moment of making the application; and while acknowledging its advantages I ought to warn you of its dangers.

Two cases will always dwell in my memory.

A strong man, of colossal frame, came one day to consult me in my office; he was sent me by my colleague and friend, Lebreton. At the moment when I introduced into the back of the throat the brush charged with the diluted ammonia, he was seized with a frightful paroxysm of orthopnoea; in an instant he leaped to his feet as if thrown up by a spring, and rushed to the window in a state of fearful suffocation. I believed he was going to die, and he thought the same. Nevertheless the relief came; but the patient did not care to try a second experiment.

Some time after this, a lady, whom I have since had occasion to see, came to consult me. This time I operated with the most extreme caution; and, notwithstanding, hardly had the brush touched the pharynx when a terrible attack of dyspnoea came on. This time, at any rate, I was able to watch the result of treatment, and I learned that the patient remained two months without a return of her attacks; an exemption which she had not had for a long time.

Our patient in No. 1 will tell you that he, too, has been subjected to this application of ammonia, and that the only time he submitted to it he was seized with such an attack of dyspnoea that he seemed to be at the point of death. From that moment, too, he had his attacks every four days, returning at the hour the ope-

ration was performed, while previously he had an attack only once in three months.

The treatment of Ducros, then, does not cure all cases, although many patients bear it with perfect ease. Ducros employed it daily without ever observing any bad effects. Nevertheless, the accidents which I have witnessed have shown me that we should use it only with extreme caution, and that death itself may happen in the midst of one of these fearful crises. Therefore, when I have recourse to this remedy, I take the precaution which I also recommend you to employ. I cause the patient first to breathe the vapor of the ammonia, by passing under the nose a phial filled with this alkali; then I touch the throat the first time with a solution of one part ammonia to nine parts of water. The next day I use a solution containing eight parts of water, then seven, gradually coming to a solution of one part to three, and at last, when the patient has become accustomed to it, I use a solution of equal parts.

There is another method of employing ammonia, which is to keep the patient in an atmosphere of ammoniacal vapors, which are disengaged by leaving in the chamber plates filled with this substance.

It is to these vapors that certain patients owe the relief which they obtain by a residence, more or less prolonged, in places where this ammoniacal vapor is disengaged. I have already quoted the case of the captain of a vessel, whose history Dr. Vidal communicated to me, and who was free from his attacks while he was navigating a ship filled with guano.

The internal use of ether, either under the form of a syrup or in capsules, is a means which also sometimes succeeds; sometimes, also, I have obtained good results from an emetic given at the right time. That which I employ is ipecacuanha, of which I give forty-five grains in powder, divided into four parts, to be taken every ten minutes until an effect is produced.

I have indicated some of the means proper for combating the attacks of asthma; it remains for me to speak of the means to be employed to prevent their return.

Here the intervention of art is often less efficacious than in the first case; often it is powerless.

The following is the method of treatment which has had, in my hands, the most fortunate result in the cases in which I was able to try it.

This plan of treatment is long, and requires to be followed with great exactness; it is composed of the following series of means:

1. During ten successive days, in each month, the patient takes, on going to bed at night, at first one, then three days after two, and the four last days four pills of the following composition: extract of belladonna, 0.01 centigr.; powdered belladonna root, 0.01 centigr. Ft. pil. i.

2. During the next ten days, the preparations of belladonna are replaced by the syrup of turpentine, of which the patient is to take at night four hundred and fifty grains.

3. During the last ten days of the month, the patient is to be put on the use of arsenical fumigations, which are made in the following manner.

A solution is made with fifteen grains of arseniate of soda in three hundred of distilled water. With this solution soak a piece of paper, not sized, so that it may dry easily; the paper, properly dried, is divided into twenty equal parts, each of which, consequently, holds five centigrammes, or three quarters of a grain, of arseniate of soda.

Each piece of paper is folded into the form of a cigarette. The patient, having lighted it, inhales the smoke, which by a slow inspiration is made to enter the bronchial tubes. But four or five whiffs should be taken once a day. In the same way as with the inspirations of nitre, if the patient cannot smoke the cigarette, he makes use of it by burning the piece of paper rolled up into a ball under a tunnel, or paper cone, in the manner I have mentioned.

Finally, as a complement to the treatment, the patient ought to take, once in ten days for a year, in the morning fasting, a powder of a drachm of Peruvian bark. During fifteen years that I have employed this method of treatment, I have had reason to be pleased with the result in a good number of cases.

In speaking to you of the causes of asthma, I have told you that climate and locality have a decided influence on certain patients; I have mentioned cases of asthmatic patients who never had an attack while they resided in certain localities, whereas in others they were constantly tormented. This circumstance should be taken advantage of. But in advising these patients to change their residence, you ought to refer them to their own experience, or to warn them, if they have not tried this method of treatment, often efficacious it is true, that experience alone should be their guide, for often you may exhaust the jurisdiction of medicine, so to speak, without obtaining satisfactory results. There does not exist, in fact, an absolute rule in this matter. A place answers perfectly well for one patient, which does not suit another. Thus, low places generally agree with asthmatics; high lands are generally hurtful, and yet I have known a general, who, subject to incessant attacks of asthma during his residence in Paris, was free from them during ten months that he passed at Clermont-Ferrand, and had not the slightest attack during the time that he remained among the mountains of Mont-Doré, where he made numerous excursions on foot and horseback.

You perceive, then, the peculiarities of this singular affection; etiological, pathological, therapeutic peculiarities, all show you that asthma is of an essentially nervous nature.

S. L. A.

CASE OF SUDDEN DEATH, ATTRIBUTED TO IMPRUDENT BATHING.

[Communicated for the Boston Medical and Surgical Journal.]

BY EDWARD WARREN, M.D.

A SINGULAR case of sudden death came under my notice upon Thursday last, the 17th inst.

I was called, about half past four o'clock in the afternoon, to visit a boy in a fit. On arriving at the house, I found a lad of 9 years of age in severe convulsions of a peculiar character. I learnt from the young man who was with him, and who drove a milk wagon, that he belonged to Newtonville, and had been in the frequent habit of getting into his cart upon the road, for the pleasure of a ride. On this day, on passing the usual place, he whistled and checked the speed of his horse, to give him the opportunity, if he wished. The boy came out of the woods, ran after the wagon, and got in. He talked for some time, and told the milkman that he had been into water, which the latter supposed was said in joke. He continued to talk until they reached Weston bridge, a few rods from a house where they stopped to take milk. When his companion first noticed that anything was amiss, the appearance of the lad led him to suppose he was seized with lockjaw. He was carried immediately into the house, vomiting by the way. I saw him very soon after. There was, at first, some relaxation of the spasms; and although his teeth were firmly closed together, I found no great difficulty in getting down a dose of ipecac. Sinapisms were applied to the bowels, and the limbs and head rubbed with ammonia. His feet had already been placed in a warm bath.

The spasms became more violent; they were of a tetanic character. The facial muscles were in powerful action, producing every variety of grimace and contortion of the countenance, resembling the action of galvanism upon the recent subject. The pupils of the eyes were fixed and turned downward, so as to be scarcely visible. There was frothing at the mouth. The body was bent backward, producing opisthotonos. The whole appearance resembled that which I have witnessed from an overdose of strychnine, and led me to inquire whether it was possible he had found any poisonous berries in the woods.

As soon as sufficient hot water could be obtained, I had him placed in a hot bath. The limbs became relaxed, the pupils assumed a natural position, and there was slight appearance of returning consciousness. But the contortions of the facial muscles soon returned. Gradually, however, they ceased, the whole system became relaxed, and the pulse imperceptible; the breathing became more gentle, then intermitted, and soon stopped. His death took place within about an hour and a half from the commencement of the attack. The sinapisms had produced no redness, and there was no effect from the ipecac.

I subsequently learnt that he, with two other boys, had gone into a pond to bathe. One of the others had gone home directly, and dropped down insensible upon reaching his father's yard. He recovered. The third boy, it is said, did not take off his clothes as the others did, but merely waded into the water. I am told, also, that they had dug up and eaten some roots which they found in the woods, and that one of these roots was shown to a physician in Newtonville, who pronounced it of a medicinal character, but not poisonous.

I am not aware of any root or berry in the neighborhood, that could produce effects resembling those from *nux vomica*. On the other hand, it is singular for chill to act in this manner upon the spinal marrow and brain, producing the effect of an irritant and stimulant. The usual action of cold is to torpify, not to excite, the nervous system. Torpor and insensibility are the well-known results of cold. Paralysis of the lower limbs is not an unfrequent attendant upon immersion, for some time, in cold river or brook water. We sometimes hear of the ice being broken in winter, for the purpose of religious immersion. No unfavorable results have occurred in these cases. But the vomiting, and the high degree of stimulation of the nervous centres, is at least uncommon.

The patient ran after the milk wagon, got in as usual, and appeared lively and talkative. It might be supposed that the run after the wagon would counteract, in some degree, the effect of cold bathing, by exciting the circulation; while the subsequent ride was not long enough to produce much chill; the weather on the 17th not being very cold. If the symptoms could have been attributed to any fresh poisonous root, there was just time enough for its influence upon the system, which the exercise of running and riding might have accelerated.

The *Traveller* states that he was buried upon Sunday, and that his body presented a remarkably fresh appearance, the color hovering about the lips, as if life still lingered. Such I believe to be frequently the case where life is destroyed by sudden and powerful action upon the nervous system.

Newton Lower Falls, March 24, 1859.

OBSERVATIONS AND REMINISCENCES ON THE USE OF CHLOROFORM AND ETHER.

BY P. PINEO, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

It was my good fortune to witness the first capital operation performed under the influence of the *Letheon*, at the Massachusetts General Hospital, in the fall of 1846. Since that time, more

than 12 years, I have been in the almost daily habit of administering ether and chloroform, in midwifery, as well as in surgical and medical cases, and my experience has been entirely free from fatal or even very uncomfortable results.

That there is danger in the injudicious use of both ether and chloroform, is not to be questioned. Of the comparative danger of the two, there is also no question—chloroform being more dangerous, not *per se*, but because it requires more care and enlightened experience in watching the effect on the system. It is more rapid in its effects, and requires a larger admixture of the oxygenating influence of the atmosphere, than ether.

That a perfectly healthy animal or human being can be brought to a state of apparent death, by anæsthesia, with comparative safety, I have no question. I have subjected different animals—cats, dogs, mice, &c.—to the influence of chloroform and ether until there was no sign of life, and witnessed their gradual recovery when exposed to atmospheric air; often without any attempt at resuscitation, though sometimes artificial respiration was required. I have given to horses sufficient chloroform to control all motion, and in one case operated for cataract on both eyes, without the slightest twitching of a muscle, both eyes being fixed and immovable. In another case, I kept a horse near two hours under the influence of chloroform, in performing a prolonged operation. Perfect recovery was soon manifest when pure air was allowed.

When chloroform was first introduced, I was called to attend a woman in labor with her first child. The patient was 22 years of age, finely proportioned, fat, and enjoying rude or rustic health. The child proved to be unusually large, weighing 14 pounds and some ounces. The labor was long continued, and difficult. At a proper stage of the labor, I administered chloroform freely, short only of stopping the pains. Other patients requiring my attention, I left the woman for a short time, and was unavoidably kept away two or three hours. I left several ounces of chloroform, giving permission to the nurse to use it carefully if the patient suffered greatly. On my return, I found that my chloroform had disappeared, and from accounts, the patient had been kept insensible by the use of it for hours. The patient was delivered without instruments, and had a quick and perfect recovery.

A young man, about 21 years of age, very muscular, possessing the same rude and robust health as the preceding patient, has had strangulated inguinal hernia, three or four times at different periods within about two years. Extreme muscular prostration was necessary in order to reduce the hernia. Chloroform was given to complete relaxation and apparent death, the tongue falling back over the glottis and all respiration ceasing, and even the heart's action being undiscernible. By discontinuing the chloroform, seizing the tongue and pulling it forward, exposing the patient to fresh air, and exciting artificial respiration by the postural meth-

od, the patient would soon resume his breathing, and the next day be quite comfortable.

But there are cases with a low and anæmic condition of the system, with or without cardiac disease, where the greatest caution is necessary. I have recently had two or three such cases. On inhaling a small quantity of a mixture of chloroform and ether, great irregularity of the heart became manifest, a disposition to syncope, a nameless distress, &c. In one case, these symptoms were present when the patient had not the slightest degree of fear about breathing the anæsthetic.

Mrs. W. had been subject for years to occasional attacks of rheumatism and irregular action of the heart. My diagnosis was organic disease of the heart. Having decayed and troublesome teeth, and wishing them extracted, she requested me to go with her to the dentist and administer an anæsthetic. She would not be dissuaded, but insisted quite peremptorily on inhalation, and I acquiesced in her urgent wish, and administered a mixture of ether and chloroform. I carefully watched the effect on the heart, desisting as soon as untoward symptoms were manifest, but etherizing sufficiently for the patient to have several teeth extracted, and almost without pain. The next day the patient felt no unfavorable effect from the inhalation. A few months after, she died in an instant from disease of the heart.

The foregoing cases tend to show—

1st—That perfectly healthy and robust human beings and animals can breathe chloroform and ether, to almost any reasonable extent, with impunity.

2d—That anemic patients, with a depressed condition of the system, flabby heart, &c., require great care and watchfulness during the administration of anæsthetics; and although we cannot always fully diagnose these cases, yet, with caution, and a knowledge which can appreciate danger in its incipency, with the prompt use of stimulants and restoratives when necessary, we can generally insure against accidents in such cases.

3d—That the fact of structural disease of the heart being present need not wholly exclude the use of anæsthesia, but it should in such cases be resorted to with great caution.

For an inhaler, I use a folded napkin, which permits the ready admixture of the atmosphere to whatever extent may be desired.

For slight operations, I think the rule should be, the minimum dose that will produce the effect desired.

The quality of the chloroform and ether is a most important consideration; too much care to have them pure, cannot be taken. The impurity of the material has often much to do with the uncomfortable effects produced.

Queechy, Vt., March 21, 1859.

A CASE OF CONGENITAL DEFORMITY.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—The following case of congenital deformity recently fell under my observation, and may be of interest to your readers.

I was called, October 31, 1858, to attend Mrs. J. A., in confinement with her third child. She was delivered of a still-born male child, after a brief labor, and which had talipes varus of both feet; curvature of the spine; a total absence of anything resembling a neck; the head resting directly upon the body, and considerably drawn back, so as to make the face look almost directly upward; and what was still more singular, it had a full set of teeth in the upper jaw as far back as the first molar tooth, which was much larger, in proportion, than the other teeth, standing out very prominently, and as large as the same tooth in a child ten years of age. They were all of a yellowish white color, and of a cartilaginous character. The mouth was very large, the corners drawn up, giving it a horrid sardonic grin; displaying all the teeth, which seemed to protrude, the upper jaw being more prominent than the lower.

S. MITCHELL, M.D.

Cameron Mills, N. Y., March 18, 1859.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY F. E. OLIVER, M.D., SECRETARY.

JAN. 24th.—*Cancer of the Liver.* Case reported by Dr. COALE.

E. P., a maiden lady, æt. 53, had generally enjoyed excellent health until June last, when she felt she was weaker than usual, and had occasionally attacks of nausea and vomiting without apparent cause. She travelled for two months or so, without any marked change in her condition. Dr. C. saw her early in October. She was bright and cheerful, but complaining of great debility. The complexion was clear; tongue clean; pulse natural; appetite less than natural; occasional nausea and vomiting, even after the simplest and slightest food; the dejections natural in appearance, free and regular; urine at times high colored and loaded with lateritious sediment. Not the slightest pain was felt, and no malaise except that from debility. On examining the abdomen, a firm tumor was discovered in the right hypochondrium, extending as far as the median line, and as low as the crest of the ilium. It was not tender. The case being apparent as one of malignant tumor, and the vital functions being as yet undisturbed for the most part, the treatment was confined to sedatives and calmants at night, for she was apt to be wakeful. The debility increased, and the urine became green, and, on examination, was found to contain a large portion of bile. The bowels two or three times required prompting by aperients, but the stools were always natural in color. Within two weeks of death, very severe pain was felt at times in the tumor,

requiring decided anodynes. At this period, also, for the first time was there any tinge of bile in the skin. The feet also swelled, but not to any great extent. The urine became a deeper green, and was still more loaded with deposits. Death occurred December 4th.

On examination after death, the liver was found greatly enlarged, and pervaded everywhere with scirrhous masses of every degree of consistence, from a hard, firm nodule, to a soft, pultaceous mass. The gall-bladder was filled with gall-stones, apparently composed chiefly of cholesterine with very little coloring matter. All the other organs were natural.

The noticeable points in this case are—the slight disturbance of the functions generally, and more particularly those in which the liver is immediately concerned; the natural color of the stools and also of the skin until within two weeks of death; the vicarious task of the kidneys in eliminating the bile; and the generally comfortable condition of a patient with so serious a malignant disease.

JAN. 10th.—*Cancer of the Thigh; the Disease subsequently appearing in the Pleura and Lungs.* Case reported by Dr. GAY, and the aspects shown by Dr. ELLIS.

Mrs. T., aged 72, was operated upon at the Massachusetts General Hospital, on the 3d of September, 1858, for a large encephaloid tumor of the right thigh, situated posteriorly, of five or six months' duration. The weight of the tumor was two and three quarters pounds, and strongly adherent, for the distance of three or four inches, to the sciatic nerve, along the upper half of its course.

For several days afterward, there was very severe pain in the posterior part of the thigh and leg, which was evidently referrible to the sciatic nerve. At the end of the week, she was more comfortable in every respect. The wound, which at the time of the operation was about ten inches in length, united by adhesion throughout most of its extent. The Record states:

"Nov. 14th.—Wound healed. Patient thinks she is well enough to go home." In a day or two from this time, she walked about the room without assistance. On the 17th, a hard nodule, deep seated, was discovered in about the centre of the wound, not painful, except during extension of the limb. This nodule increased, and, on the 26th, was as large as a good-sized apple, firm, hard, somewhat movable, with occasional stinging pains. Nov. 27th, by her request, the tumor was again removed. It was very adherent, at its deepest part, to the surrounding structures. The sciatic nerve was implicated, as before. The tumor weighed three quarters of a pound, and, like the first one, under the microscope showed an unmistakable malignant growth. After the operation, for a few days she suffered about the same as she previously had. For about a week, the wound looked sufficiently healthy. Dec. 14th, a part of the granulations had a suspicious look, and, on the 18th, there was no doubt that the disease was returning. No complaint was made of any pain in the region of the wound, but all the pain was referred to the leg and foot. Dec. 23d, the diseased growth was four inches long and three inches wide. To-day, for the first time, she had sharp, stitichy pains in the left infra-mammary region, with some cough, and expectoration of mucus. The nose was stuffed up, and there was frontal headache and injection of the conjunctival membrane. On percussion and auscultation

tion, there was dulness and a diminished respiratory murmur, in lower half of the left chest, anteriorly and laterally.

Dec. 30th.—The tumor of the thigh was increasing, the pain in the leg being still severe. The pain in the side was at times very acute, and occasionally was entirely absent. Not much, if any, change in the dulness and absence of the respiratory murmur. There was scarcely any expectoration, and the cough was less frequent.

Jan. 4th, 1859.—Patient was evidently failing rapidly, from the increase of the tumor of the thigh, and from the trouble in the chest, which was feared to be of a similar malignant nature. The pain in the side was more acute and darting, and the cough more frequent.

She lingered along, and died Jan. 9th, at 9½, P.M.

Sectio Cadaveris.—The following is the account of the autopsy, made by Dr. ELLIS.

In addition to the red mass which projected above the external surface of the thigh, a number of tumors were found in the immediate neighborhood, from an inch and a half to two inches in diameter. All were quite soft, and of a delicate pinkish color.

The pleural cavity contained five pints of serum. The lung lay against the spine, and was quite firmly adherent at the posterior and upper part, and, to a limited extent, below. Upon its external surface, and other parts of the pleura, were many bright-red, smooth, rounded nodules, from one or two lines to two inches in diameter. These were most numerous and largest in the lower part of the costal, and in the diaphragmatic pleura, where they formed almost a continuous mass. Lying among these were a few small, whitish, semi-gelatinous, pediculated growths, entirely different in their appearance from those above described. No disease of the kind in the opposite pleura.

Left lung dark-red and fleshy. In the substance was an irregular, soft, whitish mass, perhaps two inches in diameter. This appeared to be distinct from the internal growths. In the right lung were several soft, whitish nodules, from a quarter of an inch to an inch in diameter.

Several of the bronchial glands contained deposits like those found in the lungs.

The liver was quite large, of a light-yellow color, and very fatty. In its substance were a number of soft, whitish nodules, as large as peas, resembling the growths previously described.

At the point of the splenic artery where it bifurcates, just before entering the spleen, was an aneurism, two thirds of an inch in diameter, the walls of which had undergone a cretaceous change.

As already stated, the growths in the lungs and liver were soft and whitish; but those of the thigh and pleura had a pinkish tinge.

Microscopic Examination.—Portions from the external tumor, and those within the lungs, pleura and liver, were examined. They all contained, with slight variation, the same elements. The most prominent of the latter were elongated cells, many of them quite long. These contained, for the most part, elongated nuclei, some with distinct and large, but more with indistinct nucleoli. They were all more or less granular. A few large, round or oval bodies were seen, probably free nuclei, some of which contained well-marked nucleoli. The cells on the external tumor contained many granules, or minute

globules, and were evidently degenerating, although to the naked eye the color did not indicate it.

Whether the cells in the greater part of the tumor first removed could properly be called fibro-plastic or not, there was a marked difference in the different portions of the first growth; that difference was still very noticeable in the re-growth; and in the specimens removed after death, although there was a greater uniformity in the appearance of the cells, and but few had the large, well-developed nuclei and nucleoli, they were certainly much more nearly allied to those previously found in the soft portions of the primary and secondary tumors than to the others.

Bibliographical Notices.

Congenital Exstrophy of the Urinary Bladder, and its Complications, successfully treated by a New Plastic Operation. Illustrated. By DANIEL AYRES, M.D., LL.D., Surgeon to the Long Island Hospital, &c. &c. New York: 1859.

THIS pamphlet, of 14 pages, with 4 wood-cuts, contains the report of an operation undertaken "in the hope of mitigating the deplorable results of parturition," viz., prolapsus uteri, and for the "melioration of a hitherto intractable deformity."

An ingeniously-designed plastic operation, performed upon a young woman aged 28, who was the subject of a congenital exstrophy of the bladder, and who, having borne an illegitimate child four months previously, had also prolapsus uteri, resulted in the formation of a "urinary canal which would admit the little finger to be passed up one and a half inches; the prolapsus, though somewhat improved, still required a pessary to be worn. The operation was done on the 7th of December, and the patient's history closes on the 20th of January. As we have little or no detailed account of the condition of the patient's deformity after the operation, and only the statement that "the result was better than was anticipated," if the brief space of time over which the observation extends authorizes us to form any conclusion, it is, that "Mr. Errichsen," as Dr. Ayres writes the name, is about right when he says (as quoted in the pamphlet), that "operations have been planned and performed, with a view of closing in the exposed bladder by plastic procedures, but have never proved successful, and do not afford much encouragement for repetition."

If Dr. Ayres had himself turned to the first volume of the *Edinburgh Medical and Surgical Journal*, to which he refers in his preliminary remarks, he would have found that Dr. Andrew Duncan, Jr., and not "Dr. Monro," was the author of an elaborate article giving the details of 41 male and 8 female cases of exstrophy of the bladder, including an account of the celebrated case of Matthew Ussem, who, in the last century, was as well known to the surgeons and students of Europe, as the unfortunate individual who now makes the annual tour of our own medical colleges, is to us. The same journal also contains the history of one Ann Carter, 22 years old, who died worn out by the sufferings her deformity gave rise to, and whose body was dissected by Sir Astley Cooper; the article is contributed by that distinguished surgeon, and is beautifully illustrated.

In Chopart's *Maladies des Organes Urinaires*, Vol. I., pp. 338, 339, Dr. Ayres might further have found the amusingly-described case of Oebrol, which was operated upon successfully, and which would have set at naught his theory that a "prolongation of the urachus into the cord acts as a foreign body to prevent the osseous union of the symphysis and bodies of the pubis," so that the "recti and other abdominal muscles necessarily inclining off to be inserted at these abutments, removes all anterior support from the viscera situated in this region." (The spelling and grammar Dr. Ayres is responsible for.)

An attentive reading of his pamphlet leads us to the conclusion that the author has not sustained the pretensions of his title-page. H.

A Paper on the Management of the Shoulders in Examinations of the Chest; including a New Physical Sign. Read before the New York Academy of Medicine. By JOHN W. CORSON, M.D. [From the New York Journal of Medicine.] New York: H. Baillière. 1859. 8vo., Pp. 32.

We commend this pamphlet to the attention of all practising physicians, as containing several new and comparatively valuable suggestions. We have not yet had much opportunity of putting into practice the various methods by which the author proposes to render the respiratory sounds more audible, but we can well believe that they are as efficient as he represents. They consist in stretching the muscles of the chest by placing the arms in different positions. The tissues between the lungs and the ear of the observer are thereby rendered thinner, and at the same time harder, and consequently become better able to conduct sound. The new physical sign claimed by Dr. Corson is a kind of prolonged, loud, liquid breathing, as if through a layer of wet sponge, which he calls *moist respiration*, and which is heard either before or after the period of mucous râles, about the middle of the lung behind, in bronchitis. Besides this sign, he describes another, which we believe to be of great value, and which has escaped the notice of previous observers; it is a diminution in the movements of the shoulder during respiration, on the side corresponding with the diseased lung. It may be observed in phthisis, pneumonia and pleurisy. In some cases there is a difference in the relative stiffness of the top of the shoulder and the inferior angle of the scapula, depending, apparently, on the situation of the disease, which seems "to paralyze, as it were, the parts nearest." Thus, when a small bed of tubercles was found at the extreme apex of the lung, the stiffness would be mostly acromial; but if they were situated nearer the middle of the organ, the stiffness would be chiefly confined to the angle of the scapula. The difference in the movements of the scapulae may not only be seen, but felt, by placing an index finger on the angle of each bone, and for this purpose it is not necessary to remove the clothing. A table of 18 cases is subjoined, in which the motion of the shoulders was modified by disease.

The pamphlet concludes with some suggestions on the treatment of phthisis, in which the writer speaks in a hopeful tone on the possibility of arresting the disease, and ultimately restoring the patient to health, and he quotes a few cases which have fallen under his own observation, in which the success has been most gratifying. The style of the author has a certain animation which makes his essay quite

attractive. He is evidently an enthusiast, not only in the science of medicine, but in the ends to be obtained by it. We think he has made a real advance in the diagnosis of diseases of the chest, and we cordially commend his views to the attentive consideration of the profession.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MARCH 31, 1859.

THE BATH TIMES AND THE MEDICAL JOURNAL.

THE *Bath Times*, in reply to an article in the *JOURNAL* complaining of an unjust attack, in that paper, on the medical profession, pays us a high compliment. It says, "the Boston Medical and Surgical Journal is one of the most popular, most influential and most highly-valued medical journals of the country. It sustains an important relation to the profession; is, and ever has been, ably conducted, and, quite as refreshing as anything else, is the fact that its columns are kept free from vituperation and scurrility." We thank the *Times* for this handsome testimonial of merit, and it will ever be our aim to be worthy of it. The *Times* also admits the injustice of condemning the whole profession in Massachusetts, on the supposition that the surgeons were in fault in this particular case, and regrets that its language was susceptible of such a construction.

The *Times*, however, is not convinced that there was no error in diagnosis in the case of the Rev. Mr. Thayer, and although we can hardly hope to make things quite clear to a layman, we will state the reasons for our opinion. The newspaper statement is manifestly incorrect. The use of the probe, in a recent case of compound fracture, is not to ascertain the presence of mortification, which does not supervene until a later period, but to discover the amount of injury done, from which an opinion might be obtained as to whether mortification would be *likely* to come on, in which case it would be expedient to amputate as soon as the patient's strength should rally sufficiently. The question whether mortification had taken place would be determined by the eye, and not by the probe, since it would begin at the extremity of the limb, instead of at the seat of injury, and at the surface, instead of the deep parts. It is obvious that in many cases the question of the propriety of amputation must be one of extreme difficulty, since it depends upon many elements, some of which are withheld from us. There could be no question as to the diagnosis in so obvious a case as this, but there might be a mistake in the prognosis, i. e., as to whether the injury would necessarily compromise the life of the patient. The actual facts of the case, as we learn, are that, at the consultation, one of the medical gentlemen was in favor of amputation, the other two were opposed to it, and hence it was not done.

The *Times* is very much inclined to doubt our assertion that medical men are among the hardest worked and poorest paid in the community, and its chief argument seems to be that the physician's bill, in fatal cases, is made by law one of the first to be paid out of the

estate of the deceased ; and it labors under the erroneous impression that physicians get at least seventy-five cents or one dollar for each professional visit. "It is really a question," says the *Times*, "which may soon demand solution, if medical attendance will not have to be provided for the common laborer as for the pauper, at the public expense. How is it possible for a poor man to pay seventy-five cents or a dollar a day for medical attendance upon a sick wife or child, to say nothing of druggists' bills and other extras?" This question has long ago been determined. It seldom happens that the laborer has to pay seventy-five cents for a visit from a respectable physician. He is aided in large communities by the establishment of dispensaries, where not only paupers, but the poor of the laboring classes, receive advice, attendance and medicine gratis. Among a more scattered population they also receive advice, attendance and medicine gratis ; but from whom ? From physicians ; few unconnected with the profession are aware how much time, care and money are bestowed upon the poor by the medical profession. What Sir Walter Scott says of the Scottish country physician, will apply to the profession in this country, and, we believe, in all countries. Who does not remember that beautiful tribute to his disinterestedness and humanity, in *The Surgeon's Daughter* ? We quote the concluding sentences : "I have heard the celebrated traveller, Mungo Park, who had experienced both courses of life, rather give the preference to travelling as a discoverer in Africa, than to wandering by night and day the wilds of his native land in the capacity of a country medical practitioner. He mentioned having once upon a time rode forty miles, sat up all night, and successfully assisted a woman under the influence of the primitive curse, for which his sole remuneration was a roasted potato and a draught of buttermilk. But his was not the heart which grudged the labor that relieved human misery. In short, there is no creature in Scotland that works harder and is more poorly requited than the country doctor, unless it may be his horse. Yet the horse is, and indeed must be, hardy, active and indefatigable, in spite of a rough coat and indifferent condition ; and so you will often find in his master, under an unpromising and blunt exterior, professional skill and enthusiasm, intelligence, humanity, courage and science."

STUDIES OUT OF SCHOOL.

We took occasion, several years ago, to express our opinion on the subject of the injurious effects of excessive application to study on the young, and more particularly of lessons out of school. We are glad to see that Dr. RAY, in his late Report as Superintendent of the Butler Hospital, has devoted much space to the consideration of this topic, and that he agrees with us in the opinion that in many cases this practice lays the foundation for future disease. The subject has been discussed of late by the School Committee, and we hope that the opinion of so high an authority as Dr. RAY will cause attention to be more strongly attracted to this point, not only in the School Committee, but throughout the community. There is no doubt that insanity is on the increase in our country, if not in all civilized countries, and it behooves us to prevent this tendency, so far as possible. Over stimulation has the same effect on the mind that it has on the body—it renders it less able to resist those deleterious influences to which it must inevitably be exposed. If the vigor of the intellect has been

sapped by excessive mental application before it has attained maturity, how can it help yielding to the pressure of grief, excitement, responsibility, anxiety, and other powerful influences which must afterward assail it?

We do not mean to say that lessons out of school are the cause of all the insanity in this community, or of a large part of it; but we do assert that the children in our public schools are frequently overstimulated, and that such excess cannot fail to impair the mental powers. Dr. RAY says that six hours is the ordinary limit of intellectual labor, in an adult, which can be indulged in, without fatigue and injurious effects. If this limit be exceeded, the evil consequences show themselves, sooner or later, in some form of mental disorder, as well as in a depreciation of the quality of the result. If, then, six hours be enough for an adult, certainly it should never be exceeded by children; as well might we expect them to undergo with impunity the same amount of bodily labor as those who are full-grown.

We believe, as we remarked in our previous article, that by shortening the hours of study to a reasonable length, the total amount accomplished would not be diminished. When moderately exercised, the mental powers retain their full vigor; but if pushed too far, although it may not be evident at first, the intellect becomes less equal to its task. We hope the time will soon come when children will have less study from books and more from the observation of nature; when the natural sciences will be more taught to the young, and when more out of door life will make them stronger, more cheerful, and even more capable of intellectual labor than they now are, shut up in furnace-heated, crowded school-rooms.

PALMER'S ARTIFICIAL LEG.

THE articulations of knee, ankle, and toes, consist of detached ball-and-socket joints, A, B, C. The knee and ankle are articulated by means of the steel bolts, E, E, combining with plates of steel firmly riveted to the sides of the leg, D, D. To these side plates are immovably fastened the steel bolts, E, E. The bolts take bearings in solid wood (properly bushed) across the entire diameter of the knee and ankle, being fourfold more reliable and durable than those of the usual construction. All the joints are so constructed that no two pieces of metal move against each other in the entire limb. The contact of all broad surfaces is avoided where motion is required, and thus friction is reduced to the lowest degree possible. These joints often perform many months without need of oil, or other attention, a desideratum fully appreciated by the wearer.

The tendo Achillis, or heel tendon, F, perfectly imitates the natural one. It is attached to the bridge, G, in the thigh, and passing down on the back side of the bolt, E, is firmly fastened to the heel. It acts through the knee bolt, on a centre, when the weight is on the leg, imparting security and firmness to the knee- and ankle-joints, thus obviating all necessity for knee-catches. When the knee bends in taking a step, this tendon vibrates from the knee-bolt to the back side of the thigh, A, Fig. 2. It descends through the leg so as to allow the foot to rise above all obstructions, in flexion, and carries the foot down again, in extension of the leg for the next step, so as to take a firm support on the ball of the foot. Nature-like elasticity is thus attained, and all thumping sounds are avoided.

Another tendon, H, of great strength and alight elasticity, arrests the motion of the knee, gently, in walking, thus preventing all disagreeable sound and jarring sensation, and giving requisite elasticity to the knee.

A spring, lever, and tendon, I, J, K, combining with the knee-bolt, give instant extension to the leg when it has been semi-flexed to take a step, and admit of perfect flexion in sitting.

A spring and tendons in the foot, L, M, N, impart proper and reliable action

to the ankle-joint and toes. The sole of the foot is made soft, to insure lightness and elasticity of step.

The stump receives no weight on the end, and is well covered and protected to avoid friction and excoriation.

The late Prof. Mutter, of Philadelphia, in a letter to the inventor, thus speaks of Palmer's artificial arm, which was described in a recent number of this Journal:

"Philadelphia, Dec. 14, 1858.

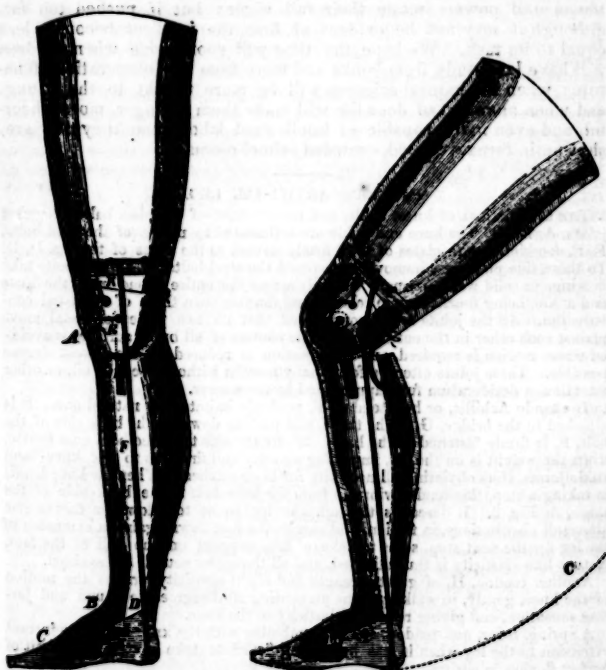
"MY DEAR SIR,—I am really much gratified to find that your ingenuity and perseverance have at length accomplished what the profession has so long waited for in vain—a *useful artificial hand and arm*. The models you showed me the other day appear to accomplish every indication, and are worthy companions to your unequalled "artificial legs." After many years' observation of the working of the latter, I am compelled to repeat, what I have already expressed in writing, that neither in Europe nor America is there an instrument of the kind, in my judgment at least, worthy of comparison with them.

"Trusting that you will continue your efforts to relieve your afflicted fellow creatures,

I remain, very sincerely yours,

"B. FRANK PALMER, Esq., &c. &c."

THOS D. MUTTER."



ST. LUKE'S HOSPITAL.

THIS is a new Hospital, which has recently been erected in New York, in the upper part of the city, occupying the block between 54th and 55th Streets, from 5th half way to 6th Avenue. Within three blocks of the Central Park, and upon some of the highest ground on the Island, this situation has been admirably chosen for the erection of a hospital, and the building itself, in its architectural beauty, is an ornament to the city.

The Hospital consists of a main building, and two wings, each of which is 150 feet in length. The main building is occupied, on its lower floor, by reception rooms, rooms for the house officers, &c., and above by an exceedingly beautiful and chaste chapel, in which religious service is conducted by the Rev. Dr. Muhlenberg on the Sabbath, and prayers are read daily at 12 o'clock. The religious element is noticeable in another feature connected with the Institution, the nurses being all ladies of refinement and education, who have devoted themselves to attendance upon the sick; and an experience of several years, at the Infirmary connected with the Church of the Holy Communion, has shown that these Protestant Sisters fill most admirably the office which they have nobly chosen. A sisterhood of this character is, we believe, new in this country, but it resembles that of the well-known Lutheran Kaiserswerth Hospital and that of the Protestant Deaconesses in Paris.

The wards of the Hospital, situated in the wings, connect by doors with the chapel in the centre. One peculiar feature in the construction of the building is a corridor, in each story, which runs from the extremity of one wing to that of the opposite, between the wards on one side and the outer wall on the other. These corridors command a fine view of the Central Park, and afford a fine promenade for invalids in inclement weather.

St. Luke's is capable of accommodating two hundred patients. The medical and surgical staff has recently been filled, and consists of the following gentlemen: *Attending Physicians*—Drs. Alonzo Clark, C. F. Heywood, T. G. Thomas and W. H. Draper; *Attending Surgeons*—Drs. Gordon Buck, Geo. A. Peters and F. J. Bumstead; *Pathological Chemist*—Dr. John C. Dalton, Jr.; *Consulting Physicians*—Drs. Ed. Delafield, Geo. P. Cammann, Benj. Ogden and J. T. Metcalfe; *Consulting Surgeons*—Drs. Willard Parker, John Watson, A. C. Post and D. L. Eigenbrodt.

We notice in this list the names of several gentlemen, who, in past years, have filled the post of House Officers in the Massachusetts General Hospital; viz., Drs. Dalton, Heywood and Bumstead.

Although this new Hospital has been founded chiefly by Episcopalians, yet it is not confined to patients of any one denomination, nor has any partisanship been shown in the selection of its officers. It is the desire of its founders to place no obstacle in the way of its taking the first rank among the charitable and scientific institutions of this country. They have shown a freedom from sectarianism and a zeal for the advancement of medical knowledge, in their endowment of St. Luke's, which, added to their liberal philanthropy, is an honor to them and their city.

HYPOPHOSPHITES OF LIME AND SODA.

MESSRS. EDITORS,—Will you kindly allow me to inform the profession in the United States, through the medium of your excellent JOURNAL, that I am totally unconnected with the manufacture and sale of the Hypophosphites, both in Europe and in America. I do not recommend the salts prepared by any one person more than another, and have never derived, or attempted to derive, any pecuniary benefit whatever from my discovery. All reports to the contrary are pure fabrications, spread by interested or malevolent persons.

I remain your obedient servant,

J. F. CHURCHILL, M.D.

No. 17 Boulevard de la Madeleine, Paris, March 2, 1859.

WE are requested to state that Dr. Salter receives the names of those who wish to become members of the "New" Sydenham Society, and, as soon as a prospectus is received, will communicate full information as to terms of subscription, &c.

THE mail steamer of the 20th inst. will take to the Atlantic States, Signore Fredrico Craveri, of Bra, Piedmont, brother to the naturalist, himself a mineralogist of no mean reputation, and of the most unmitigated industry and extensive acquirements and ability, in that and the associate science—chemistry. He carries, besides the best wishes of those who have had the pleasure of his acquaintance for the one hundred days he has spent in this State, a rich and nearly complete collection of our minerals, and correct notions of our vast mineral wealth.

We commend him to the learned of the Atlantic States, as a thorough scholar and amiable gentleman. He has visited most portions of Mexico, every important mining locality in this State and on Frazer River, and is well posted in the mineralogy and geology of the Pacific Coast.—*Pacific Med. and Surg. Journal*, February, 1859.

Kentucky School of Medicine.—This Institution closed its last session by the usual Commencement exercises, on the 26th of February. We understand that it had a matriculation list of 103, and a graduating class of 28; besides conferring the *Honorarium* on two gentlemen, and admitting two others to the *Ad-eundem*. The University of this city closed its session on the 28th, and whilst we were not informed as to the exact number of its graduates, we believe it was something over 30.—*Louisville Medical Gazette*.

Caustic in the Treatment of Cancer.—A caustic frequently used by Velpeau is the chlorure of zinc, 50 parts of which, added to 100 of flour, are made into a paste with a sufficient quantity of water and mucilage. It can then be rolled out to whatever thickness may be required, cut into the proper shape, and applied to the tumor, the epidermis having been previously removed by a blister. This is one of the caustics which cause the greatest amount of pain; nevertheless, Velpeau prefers its use when the base of the tumor is very thick and far spreading, and where the cancerous tumor is very extensive. The eschar comes away at from the fifteenth to the twentieth day, and the wound heals with great rapidity.—*London Lancet*.

Improved Stethoscope.—Mr. WALTER BRYANT, of London, has made a recent improvement in the mechanism of the stethoscope. It consists of a movable extremity, or body piece, made of gutta percha, or vulcanized India-rubber, and so constructed as to fit into the tube of any ordinary stethoscope. The axis of the tube of this piece is placed at an acute angle to the edge, which is applied to the patient's body. With this instrument, while standing on the left side of the patient's bed, we can examine the right side of the patient's chest; or we can examine the axilla or back of a patient who is unable to rise.

Health of the City.—The mortality for the past week was low, there having been ten deaths less than the preceding week. There were 4 deaths from pneumonia, and 3 from scarlatina. The number of deaths for the corresponding week of 1858 was 68, of which 11 were from consumption, 9 from pneumonia, and 5 from scarlatina.

Books and Pamphlets Received.—On Poisons in Relation to Medical Jurisprudence and Medicine. By Alfred Swaine Taylor, M.D., F.R.S., &c. (From the Publishers.) Reports of the Trustees and Superintendent of the Butler Hospital for the Insane.—Report of the City Registrar of the Births, Marriages and Deaths in the City of Boston, for 1858.—Valedictory Address to the Graduates of the University of Virginia. By Henry H. Smith, M.D., &c.—Fourth Annual Report of the City Registrar of Providence, R. I.

MARRIED.—At Oxford, Ohio, Dr. Henry T. Davis, of Richmond, Ind., to Miss Jane G. McDonald, of O.

DIED.—At the McLean Asylum, Somerville, 27th inst., F. A. Noyes, M.D., 36.

Deaths in Boston for the week ending Saturday noon, March 26th, 57. Males, 31—Females, 26.—Accident, 2—apoplexy, 1—inflammation of the bowels, 1—inflammation of the brain, 1—disease of the brain, 1—consumption, 11—convulsions, 1—croup, 1—dropsy in the head, 6—drowned, 1—debility, 1—diabetes, 1—scarlet fever, 3—homicide, 1—disease of the heart, 2—inflammation of the lungs, 4—congestion of the lungs, 2—disease of the liver, 1—marasmus, 2—old age, 4—palsy, 1—rheumatism, 3—scrofula, 1—teething, 4—unknown, 1.

Under 5 years, 20—between 5 and 20 years, 6—between 20 and 40 years, 15—between 40 and 60 years, 7—above 60 years, 9. Born in the United States, 41—Ireland, 14—other places, 2.